This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A method of altering a property of a cell towards a property of one or more desired cell types comprising providing isolated RNA comprising a RNA sequence extractable from cells comprising said desired cell type(s) to a population of cells under conditions whereby the alteration of the cell property is achieved.

2. (Withdrawn) A method according to claim 1, wherein said isolated RNA is provided to a cell population in a patient.

3. (Previously Presented) A method according to claim 1, wherein said property is phenotypic.

4. (Previously Presented) A method according to claim 1, wherein said property is a cell function.

5. (Previously Presented) A method according to claim 1, wherein alteration of said property involves a genetic transformation so that said population of cells acquires an altered, inherited genotype.

6. (Previously Presented) A method according to claim 1, wherein the alteration of the cell property is the differentiation of a stem cell to an adult specialized cell.

7. (Previously Presented) A method according to claim 1, wherein the alteration of the cell property is the reverse differentiation of an adult speacialized cell to a stem cell.

8. (Previously Presented) A method according to claim 1, wherein the alteration of the cell property is the differentiation of a specialized adult cell to an adult cell of a different specialty.

9. (Previously Presented) A method according to claim 1, wherein the alteration of the cell property is a change in immunological profile.

10. (Withdrawn) A method according to claim 2, wherein said method improves stem cell mediated repair in the patient.

11. (Withdrawn) A method according to claim 2, wherein said method induces stem cell mobilization, migration, integration, proliferation and/or differentiation in the patient.

12. (Withdrawn) A method according to claim 2, wherein said method effects repair of diseased cells, alters the genetic constitution of cells, induces specific cell types and/or cell fates, changes the immunological profiles of cells, and/or induces particular desired immune functions or properties.

13. (Withdrawn) A method according to claim 2, which additionally comprises the step of providing stem cells to the patient.

14. (Withdrawn) A method according to claim 13, wherein said step of providing stem cells is sequential to, simultaneous with, or separate to said step of providing the isolated RNA.

15. (Previously Presented) A method according to claim 1, wherein the isolated RNA comprises a RNA sequence that is extractable from cells of a different developmental stage than the developmental stage of the cells to be treated.

16. (Previously Presented) A method according to claim 1, wherein the isolated RNA comprises a RNA sequence that is extractable from cells of a more active cell generative stage than that of the cells to be treated.

17. (Previously Presented) A method according to claim 1, wherein the isolated RNA comprises a RNA sequence that is extractable from cells from an individual who shows immunity or resistance to a disease or condition.

18. (Previously Presented) A method according to claim 1, wherein the isolated RNA comprises a RNA sequence extractable from foetal cells, neonatal cells, juvenile cells or embryonic stem cells.

19. (Original) A method of inducing *in vivo* or *in vitro* totipotent or pluripotent stem cells of a stem cell line or derived from a tissue of an animal or plant to differentiate into one or more desired cell types, which comprises providing isolated RNA comprising RNA extractable from tissue or cells comprising said desired cell type(s) to a cell culture of said stem cells under conditions whereby the desired differentiation of said stem cells is achieved.

20. (Previously Presented) A method of inducing *in vivo* or *in vitro* totipotent or pluripotent stem cells of a stem cell line or derived from a tissue of an animal or plant to mobilize, migrate, integrate, proliferate and/or differentiate, which comprises providing isolated RNA comprising RNA extractable from tissue or cells comprising said desired cell type(s) to a cell culture of said stem cells under conditions whereby the desired differentiation of said stem cells is achieved.

21. (Previously Presented) A method according to claim 1, wherein said cells are stem cells.

22. (Previously Presented) A method according to claim 19, wherein said stem cells are selected from adult animal stem cells or an adult stem cell line; or embryonic stem cells or a stem cell line derived from such cells.

23. (Previously Presented) A method according to claim 20, wherein said stem cells are selected from adult animal stem cells or an adult stem cell line; or embryonic stem cells or a stem cell line derived from such cells.

24. (Previously Presented) A method as claimed in claim 22 wherein said adult stem cells are bone marrow stromal cells, haematopoietic stem cells or neuronal stem cells or a corresponding derived stem cell line.

25. (Previously Presented) A method according to claim 1, wherein said cells are human stem cells or a human stem cell line.

26. (Previously Presented) A method according to claim 25, wherein said cells are caused to differentiate into one or more stable terminal cell types.

27. (Previously Presented) A method according to claim 26, wherein the cells are genetically modified prior to differentiation.

28. (Previously Presented) A method according to claim 25, wherein the cells are derived from the intended recipient of said desired cells.

29. (Previously Presented) A method according to claim 1, wherein said RNA comprises RNA extracted from tissue or cells of an individual different from the source of the cells to be treated, said extracted RNA being derived from a donor having an immunological profile compatible with the intended recipient of the desired cells.

30. (Previously Presented) A method according to claim 1, wherein a RNA extract is provided for uptake by the cells which is a whole tissue or whole cell RNA extract.

31. (Previously Presented) A method according to claim 1, wherein RNA-extractable from one or more types of brain cell or brain cell line is provided for uptake by cells.

32. (Previously Presented) A method according to claim 1, wherein the cells are bone marrow stromal stem cells and the isolated RNA provided comprises RNA extractable from one or more types of brain cell or skeletal muscle or a corresponding derived cell line of either.

33-36. (Cancelled)

37. (Withdrawn) A method of reversing in vitro the differentiation of differentiated cells of a cell line or obtained from the tissue of an animal or a plant to produce a desired type or types of totipotent or pluripotent stem cell(s) or stem cell line(s), which comprises providing isolated RNA comprising RNA extractable from the desired type(s) of stem cell or stem cell line to a cell culture of said differentiated cells whereby the desired reversal of differentiation of the differentiated cells into said type(s) of stem cell or stem cell line type(s) is achieved.

38. (Withdrawn) A method according to claim 37, wherein the stem cell is as defined in claim 22.

39. (Withdrawn) A method according to claim 37, wherein the differentiated cells are selected from skin cells, bone marrow cells and haematopoietic cells or a cell line derived from such cells.

40. (Withdrawn) A method according to claim 37,wherein the differentiated cells are fibroblasts or a fibroblast cell line and the RNA is extractable from bone marrow stem cells or neuronal stem cells.

41. (Withdrawn) A method according to claim 37, wherein the isolated RNA provided comprises RNA extractable from bone marrow stromal stem cells, neuronal stem cells or a stem cell line derived from either.

42. (Withdrawn) An *in vitro* method of producing differentiated cells, which comprises:

i) performing the method according to claim 37 to produce stem cells or a stem cell line from differentiated cells;

ii) performing the method according to claim 19 on the stem cells or stem cell line to produce differentiated cells.

43. (Cancelled)

44. (Previously Presented) Cells obtained by the method according to claim 1.

45. (Cancelled)

47. (Previously Presented) The method according to claim 23 wherein said adult stem cells are bone marrow stromal cells, haematopoietic stem cells or neuronal stem cells or a corresponding derived stem cell line.

48. (Previously Presented) Cells obtained by the method according to claim 19.

49. (Withdrawn) Cells obtained by the method according to claim 37.

50. (Withdrawn) Cells obtained by the method according to claim 42.

51. (Withdrawn) An *in vitro* method of producing differentiated cells, which comprises:

i) performing the method according to claim 37 to produce stem cells or a stem cell line from differentiated cells;

ii) performing the method according to claim 19 on the stem cells or stem cell line to produce differentiated cells; and

iii) introducing a genetic modification into the stem cells.